

IN THE CLAIMS

1. (original) Apparatus for purifying water to USP or WFI purification standards, comprising:

a heat exchanger adapted to receive chlorinated feed water to be purified, said heat exchanger heating the feed water to a predetermined temperature;

a filter connected to said heat exchanger for receiving feed water therefrom, said filter being a microfilter or an ultrafilter having a nominal pore size of about 0.1 microns or less to be capable of removing bacteria from the feed water;

a filtrate reservoir connected to said filter for receiving filtrate therefrom;

a dechlorinator connected to said reservoir to receive filtrate from the reservoir, said dechlorinator removing chlorine from the filtrate;

a backwash line connected to said reservoir to receive filtrate from the reservoir and direct the filtrate in reverse flow through the filter to backwash the filter; and

a still connected to said dechlorinator to receive dechlorinated filtrate therefrom and distill the same to provide USP or WFI quality purified water, said still being a vapor compression still or a multiple effect still.

2. (original) The apparatus of claim 1 further including a reverse osmosis membrane unit interposed between said still and said dechlorinator.

3. (original) The apparatus of claim 1 further including a filtrate treating anti-scalant device upstream of said still for treating filtrate so as to eliminate or minimize scaling within said still.

4. (original) The apparatus of claim 3 wherein said filtrate treating anti-scalant device is a water softening device located upstream of said dechlorinator and downstream of said reservoir.

2        5. (original) The apparatus of claim 3 wherein said filtrate treating anti-scalant device is a chemical injector for injecting anti-scaling chemicals into said filtrate downstream of said dechlorinator.

6-15. (canceled)

16. (original) A method of producing USP purified water or water for injection comprising:

- (a) providing a chlorinated feed water;
- (b) filtering the feed water in a chlorine tolerant microfilter or ultrafilter having a nominal pore size of 0.1 microns or less;
- (c) antiscalant treating the filtrate from the filter; and
- (d) distilling the antiscalant treated filtrate.